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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,231

06/16/2005

Hiroyuki Takada

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04/29/2008

HAMRE, SCHUMANN, MUELLER & LARSON, P.C.

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EXAMINER

RAMDHANIE, BOBBY

ART UNIT

PAPER NUMBER

1797

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,231	<b>Applicant(s)</b> TAKADA ET AL.	
	<b>Examiner</b> BOBBY RAMDHANIE	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/19/2006, 06/16/2005</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group II; claims 11-25 in the reply filed on 04/04/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17 and 19-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 19-25 recite the limitation "the liquid storage container" in Claim 11. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 17 recites the limitation "the sheet" in Claim 11. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-14 16-20, & 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiramatsu et al (WO01/196882. An English translation of this document may be found as US2002/0155616. Rejections will be referenced to the English translation).

Applicant's claims are toward a cartridge.

Regarding Claims 11-14 16-20, & 22-25, Hiramatsu et al discloses a cartridge comprising: A). At least one storage well including an upper opening and containing a liquid (See Figure 1 Items 21-29 & A-C); B). At least one reaction well including an upper opening and providing a reacting field (See Figure 1 Items 21-29, & A-C); and C). A closure for closing at least the upper opening of the storage well (See Figure 3 Item 31), wherein at least one of the storage wells and the reaction wells is provided with an adhering liquid mover which downwardly moves the liquid which adheres on a peripheral portion of the upper opening of the well or at an inner surface of the well (See Figure 1 Item 28; lower end of the receptacle).

Additional disclosures included: Claim 12: Wherein the liquid comprises at least one of a reagent (See Abstract), a diluent (See [0105]), and a cleaning solution (See [0059]). Claim 13: Wherein the liquid comprises a reagent (See [0001]). Claim 14: Wherein the reagent is necessary for causing immune reaction (See [0001]) Hiramatsu et al discloses the reagent. The patentability is to the cartridge; the intended use has been given a relative amount of patentable weight for examination purposes. As an aside, Hiramatsu et al also discloses the intended use; See Example 1); Claim 16: Wherein the closure comprises a sheet (See Figure 3 Item 31); Claim 17: Wherein

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there are a plurality of storage wells, the sheet collectively covering the upper openings of the storage wells (See Figure 3 Item 31); Claim 18: Wherein the sheet covers the upper openings of at least two wells including the storage well, out of the storage well and the reaction well (See Figure 3 Item 31); Claim 19: Wherein the adhering liquid mover is provided on the inner surface of at least one of the storage well and the reaction well (See Figure 1 Item 28); Claim 20: The adhering liquid mover comprises a notch (See Figure 1, Item 28, the rounded outer surface may define a notch (a rounded indentation)); Claim 22: The adhering liquid mover extends linearly and vertically (See Figure 1 Item 28 the mover extents in both the linear and vertical directions); Claim 23: The liquid storage container according to claim ii, the adhering liquid mover extends spirally. Claim 24: The adhering liquid mover is formed on the inner surface of at least one of the storage well and the reaction well in a manner such that an upper end of the adhering liquid mover contacts the closure (See Figure 1 Item 28 in combination with Figure 3 Item 31); Claim 25: The adhering liquid mover is formed on the inner surface of at least one of the storage well and the reaction well in a manner such that a lower end of the adhering liquid mover is positioned below a surface of the liquid when the container contains a desired amount of the liquid (See Figure 1. The relationship of the mover and the added liquid would be inherent to the cartridge).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu et al in view of Okubo et al (JP2001318101). Regarding Claim 15, Hiramatsu et al discloses the cartridge according to Claim 14 except wherein the reagent is made by dispersing an immune reactant, which reacts selectively with a specific component in a sample, in liquid as supported on solid particles. Okubo et al discloses a cartridge with this feature (See the machine English translation of JP2001318101; See Claim 9; microparticle & See [0003]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hiramatsu et al with Okubo et al because according to Okubo et al, this immunoassay method which consists of anchoring the antibody or antigen to a substrate such as a microparticle is widely used as a measuring method with simple operation.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu et al. Regarding Claim 21, Hiramatsu et al discloses the liquid storage container according to claim 20, except wherein the adhering liquid mover comprises a groove which is V-shaped in section. Hiramatsu et al does however disclose a notch as a round indentation (See Figure 1 Item 28). It

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would have been an obvious matter of design choice to modify the rounded notch with a v-shaped notched in section, since applicant has not disclosed that the V-shaped notch section solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a rounded indentation.

### ***Telephonic Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY RAMDHANIE whose telephone number is (571)270-3240. The examiner can normally be reached on Mon-Fri 8-5 (Alt Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bobby Ramdhanie, Ph.D./

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Examiner, Art Unit 1797

/B. R./

/Walter D. Griffin/

Supervisory Patent Examiner, Art Unit 1797